

ABSTRACT OF THE DISCLOSURE

A method for depositing a patterned coating of a nanostructure material onto a substrate includes: (1) forming a solution or suspension of containing the nanostructure material; (2) masking at least a portion of at least one surface of the substrate (3) immersing electrodes in the solution, the substrate upon which the nanostructure material is to be deposited acting as one of the electrodes or is electrically connected to at least one electrode; (4) applying a direct and/or alternating current electrical field between the two electrodes for a certain period of time thereby causing the nanostructure materials in the solution to migrate toward and attach themselves to the substrate electrode; and (5) subsequent optional processing.